

# BIRLA SCHOOL, PILANI

## Summer Vacation Home Assignment (SVHA) Session 2022-23 For Class 12- SCIENCE Section

Please complete the assignment as per the specific instructions given subject-wise and submit the same on 11<sup>th</sup> July 2022 when the School reopens.

ENGLISH	<p>1. Make a blog at <a href="http://www.wordpress.org">www.wordpress.org</a> and publish your blogs. Send the links via email to the respective English Teacher. Write a blog of about 200 words on any two of the following topics taking help from the given notes:</p> <p>a. Humor is the Spice of Life  <ul style="list-style-type: none"> <li>· Purpose of relaxation</li> <li>· Change in attitude and approach</li> </ul> </p> <p style="margin-left: 400px;">· Problems /hurdles /negativities in life  <ul style="list-style-type: none"> <li>· Benefits of laughter and humor</li> </ul> </p> <p>b. Positivity in Life  <ul style="list-style-type: none"> <li>· Accepting facts and flaws</li> <li>· Human instinct / Fight back</li> </ul> </p> <p style="margin-left: 400px;">· Hurdles / Problems in life  <ul style="list-style-type: none"> <li>· Reorganization / Restart</li> <li>· Will to Win</li> </ul> </p> <p>c. 'Stop Child Labour'  <ul style="list-style-type: none"> <li>· behaviours and social thinking</li> <li>· Social behaviour and requirements</li> </ul> </p> <p style="margin-left: 400px;">· Lack of knowledge,  <ul style="list-style-type: none"> <li>· Effect of education</li> <li>· Appeal to society</li> </ul> </p> <p>d. The Need to Respect the Diversity  <ul style="list-style-type: none"> <li>· increases creativity</li> <li>· a sense of belonging and loyalty</li> </ul> </p> <p style="margin-left: 400px;">· offers a variety of perspectives  <ul style="list-style-type: none"> <li>· increases productivity and collaboration</li> </ul> </p> <p>2. <a href="https://www.youthkiawaaz.com/2011/08/child-labourers-away-from-family-suffering/">https://www.youthkiawaaz.com/2011/08/child-labourers-away-from-family-suffering/</a></p> <p>Taking help from the above article interview at least two child labourers and make a very short project (appx 200 words) including:</p> <p>a. The transcript of the interview                      b. Photographs  c. Analysis of the interview                              d. Conclusion</p>
PHYSICS	<p>1. Each student will prepare individual one Investigatory Project, in accordance with the syllabus (As per CBSE guidelines).</p> <p>2. Solve NCERT Exercise Questions CH1: Q.NO. 1.1,1.2,1.5,1.9,1.1.10,1.18,1.19, 1.21,1.26 CH2: QNO. 2.1, 2.2, 2.3, 2.6, 2.7, 2.8, 2.10, 2.15, 2.19, 2.24, 2.25, 2.34. In HW copy.</p> <p>3. Prepare the notes of all the topics in HW copy for chapter 1 &amp; 2.</p> <p>Solve the numericals: Simulation link for practice  <a href="https://phet.colorado.edu/en/simulation/charges-and-fields">:https://phet.colorado.edu/en/simulation/charges-and-fields</a></p>
CHEMISTRY	<p>1. Types of Injections and Precautions to be taken.  2. An essay on "How effective are Biodiesel and Biopetrol in substituting actual Diesel and Petrol".  3. Types of Batteries, their Uses and Disadvantages with diagram.  4. Demonstrate at least 5 types of solubility of solid in liquid from your daily life and record your observations. Also check effect of temperature and volume of solvent on this.  5. Make a list of Electrochemical and Electrolytic cells used at your home.  6. Find out an innovative method to learn Modern periodic table from your NCERT book.  <b>► Complete this task in a separate notebook.</b></p>
MATHEMATICS	<p>1. Solve 20 extra questions from each of the chapters: Relations and function, Inverse trigonometry &amp; Matrices.  2. Solve all solved examples of all above chapters.  3. Plot graphs of all 6 inverse trigonometric functions.</p>

	<p>4. Write all the Trigonometric and Inverse Trigonometric Identities.</p> <ul style="list-style-type: none"> <li>• <b>Complete this task in a separate notebook.</b></li> </ul>
BIOLOGY	<ol style="list-style-type: none"> <li>1. Solve the previous year's cbse board question papers for the chapters Population &amp; Organisms and Ecosystem in a separate copy.</li> <li>2. Prepare a Project file on any topic of Class XII Biology.</li> </ol>
CS	<p>Q1 WAP to search a particular number in the <b>list and tuples</b> by using linear search method, where the numbers will be entered by the user?</p> <p>Q2 WAP to check the number entered by the user is palindrome or not?</p> <p>Q3 Design 1-D series and 2-D series (any 5)?</p> <p>Q4 WAP on string manipulation regarding string methods, string slicing?</p> <p>Q5 WAP to check the element entered by the user is upper case or lower case or even no. or odd no.?</p>
I.P	<p>Q.1 Make an IP Project PowerPoint presentation ( at least 12 slides)on the case study of any ONE of given list:</p> <p>a) Weather Forecast System. b) Library Management System</p> <p>c) Bank Management System d)School Management System</p> <p>e) Quiz Project f) Railway reservation System</p> <p>Note: Share this power point to the subject teacher by 30th June,2022</p> <p>Q.2 Write these Python PANDAS SERIES PROGRAMS in subject Class Work copy</p> <p>Que. :I. Create a panda's series from a dictionary of values and array.</p> <p>Que.:II. Create a Pandas Series with range and for loop.</p> <p>Que.:III. Create a Pandas Series for mathematical expression, exponentiation and NumPy.</p> <p>Que.:IV. Write a Pandas Series Program to Perform Some of the Object Attribute Functions.</p> <p>Que.:V. Create a Pandas Series to access data from it, with position (Slicing &amp; Indexing).</p> <p>Que.:VI. Create a Series and print all the elements that are above the 75th percentile.</p> <p><b>ASSIGNMENT LINK: <a href="https://tinyurl.com/2fjysddh">https://tinyurl.com/2fjysddh</a></b></p>
MUSIC	<p>Prepare a biography file in Hindi Language on the following Vocal artists. Make sure each artist has minimum five pages with one colourful photograph.</p> <p>1.Pandit Krishan Rao Shanker Pandit                      (4)Kaushiki Chakraborty 2.Bade Gulam Ali Khan    (5)Pandit Sanjeev Abhayankar 3.Ustad Faiyaz Khan    (6)Shruti Shirolikar</p>
PHYSICAL EDUCATION	<p>Prepare a project on any one game from your syllabus. The project consists of following topics:</p> <ol style="list-style-type: none"> <li>1. History of the game.</li> <li>2. Rules of the game.</li> <li>3. Skills of the game</li> <li>4. Terminology of the game.</li> <li>5. Diagram and dimensions of the game.</li> <li>6. Sports personalities/ awardee.</li> </ol>